

TWO NEW AMERICAN MOSQUITOES

(Diptera, Culicidæ)

BY HARRISON G. DYAR AND C. S. LUDLOW

Culex (Melanoconion) homoeopas, new species.

Male. Proboscis black, the palpi exceeding it by nearly the length of the last two joints, which are sparsely hairy, sharply pointed. Vertex of head with dense flat black scales, the tips a little bronzy, whitish along the margins of the eyes in an even border. Mesonotum dark brown, with narrow curved golden scales, mixed with brown ones about the antescutellar space and on the sides. Abdominal integument testaceous, the scales black, the first four segments wholly black above and below, the fifth with a pale triangular basal yellowish spot and a narrow transverse pale line on the venter close to its base. Legs black, the femora pale beneath; tips of femora and tibiæ narrowly pale. Wing-scales black, ligulate, becoming narrowly ovate on the forks of the second vein.

Hypopygium. Side piece curved, slightly swollen mesially, finely setose, with coarse setæ without. Clasper simple, bent at right angles in the middle (which may be an artifact), the terminal half slightly enlarged and flattened; spine subapical, appendiculate, slender. Outer division of the lobe of side piece slenderly columnar, with three broadly blade-shaped filaments and a small leaf radiating from its summit. Inner division of the lobe with the limbs well separated, the outer long, the inner short, each with a long stout sinuate filament with flattened pointed tip; a radial pecten between the inner and outer divisions of the lobe. Mesosomal plate thick, bent in the middle, tapering to a point; a thorn-like branch at the angulation, formed much as in *Culex (Micraëdes) corrigani* D. & K. (Ins. Ins. Mens., vi, plate iv, fig. 15, 1918), but the branch is pointed; articulated plate broadly spatulate, one limb more expanded than the other; basal hooks broad, recurved, expanded on one side by a wide thin membrane; tenth sternites slender, comb-shaped, narrowly expanded at base, but without shoulder or basal arm. Ninth tergites moderate, elliptical, oblique, densely setose except along the inner margin.

Type, male, No. 23942, U. S. Nat. Mus.; Jackson Barracks, New Orleans, Louisiana, October 16, 1920 (Colonel C. C. Robbins, Medical Corps, U. S. Army).

It is possible that this single male may have been transported on a fruit steamer from Bluefields, Nicaragua. It is not allied to any known North American form, belonging to a subgenus found in the American tropics.

The following table will separate the described species of *Melanoconion* on the characters of the male hypopygium.

Subgenus MELANOCONION Theobald

Melanoconion Theobald, Mon. Culic., iii, 238, 1903.

Gnophodeomyia Theobald, Journ. Econ. Biol., i, 21, 1905.

1. Outer division of lobe of side-piece with a small leaf and several setae2
This part with a large ribbed leaf and not more than one appendage3
2. Inner division of lobe of side piece with a short spine at tip and smaller one on the side.....*atratus* Theobald
This part with two long sinuate filaments, *homoeopas* Dyar & Ludlow
3. Inner division of lobe of side piece with four appendages.....4
This part with two appendages.....5
4. A short stemmed scale beyond lobe of side-piece..*spissipes* Theobald
Without this structure.....*dunni* Dyar
5. Leaf stemmed, with one large appendage.....*aikenii* Aiken
Leaf sessile, the appendage setaform.....6
6. Inner division of lobe of side piece with two large appendages,
zeteci Dyar
This part with one large and one setaform appendage.....7
7. Side-piece narrowed outwardly; a large stemmed scale inserted beyond the lobe.....*commevynensis* Bonne-Wepster & Bonne
Side-piece conical; no stemmed scale,
ensiformis Bonne-Wepster & Bonne

Culex (*Choeroporpa*) *dysmathes*, new species.

Female. Head very dark brown or black, clothed with very narrow dark brown and golden brown or ochraceous curved scales, black forked scales, and greyish-white flat scales. The dark curved scales cover the median third of the head, extending to the vertex; the black forked scales are scattered around this area; the greyish white flat scales are laterad, and, becom-

ing a little ovate, extend around the margin of the eyes, while straight across the head is a waving, uncertain line of the golden scales. Caudad to this are black curved and a few black forked scales. The occiput is often quite naked and shows the black integument. All the curved scales are very closely appressed, so as to seem unusually straight, and there is a tendency to bright golden reflection in some of the dark curved scales, so that under the compound microscope the bright golden line extends indefinitely, sometimes even to the vertex, leaving two sub-median dark oval spots, but under the hand lens there is merely an uncertain wavy line across the head. There are some black bristles around the eyes. The antennæ are brown, verticels and pubescence brown, the internodes with unusually long hairs, sometimes nearly as long as the verticels; proboscis black, swollen on the apical third, which has many short hairs, labellæ a little lighter, also hairy; palpi short, about one-sixth the length of the proboscis, and with many short hairs near and at the apex; clypeus black, median portion nude, apical and lateral portions with fine white pruinosity approaching a tomentum; eyes black.

Thorax: prothoracic lobes brown, well separated, sparsely covered with black bristles. Mesonotum shows a dark brown integument with a slightly paler broad median stripe, covered with small narrow, almost hair-like brown curved scales and heavy black bristles on the margin, at the wing-joints, and on either side of the ante-scutellar space; scutellum brown, markedly trilobed, covered with small slender brown curved scales like those on the mesonotum, black bristles on each lobe; metanotum dark brown, nude, shining; pleura light greenish brown with a few brown bristles.

Abdomen truncate and hairy at the apex, entirely dark brown scaled and except for very small dirty white basal lateral spots on the third, fourth, fifth and sixth segments, that on the fifth segment being the largest, but all are very small. Venter mostly dark-scaled, but some specimens show tiny white basal spots on a few of the segments. In considering the marking, it is to be remembered that the specimens are

bred, and in some cases poorly developed and the markings not well shown.

Legs; coxæ and trochanters greenish, having a few brown scales and bristles; femora are somewhat swollen, and light ventrally practically to the apex, otherwise the legs are brown; ungues simple and equal.

Wing membrane slightly darkened, the veins heavily clothed with dark brown clavate scales, especially noticeable on the forks of the second and fourth long veins. The first submarginal cell is comparatively long, much longer (more than three times) than its petiole, and about as wide as the second posterior cell, the stem of which is not quite half as long as the cell; posterior cross-vein is more than twice its length distant from the mid cross-vein. Halteres have white stems and dark knobs.

Length, 3–3.5 mm.; wing, 3 mm.

Male. Proboscis dark, somewhat swollen as in the female; palpi brown, longer than the proboscis by nearly the two apical joints, which are a little lighter than the more proximal joints, acuminate, and sparsely hairy, the plumes having light reflections so as to appear almost fawn colored. The antennæ are plumose, light between the nodes, the verticels dark, distal joints slender, very hairy. General coloration as in the female; wing cells shorter; ungues unequal, the larger uniserrate.

There is also a single male differing in markings in that it is more definitely black and white instead of brown and grayish, and the abdominal spots are clear white and extend on the dorsum so as to form almost continuous bands, very narrow, sometimes lacking on the median portion, and broadening toward the lateral spots. The description cannot be made more definite because in removing the apical segments, the abdomen was broken off. Apparently the insect is a little longer than the other male, about 4 mm. The differences seem small, but in the hand, and under the hand lens were sufficient to lead to the suspicion that we were dealing with another species.

Hypopygium. Side piece enlarged basally, tapering to a small conical tip. Clasper attenuated mesially, rather narrowly

snout-shaped, pilose on the anterior dorsal margin; a seta below; mesial groove curved over it; spine appendiculate, widened, subterminal, rather large. Outer division of the lobe of side piece with a short inner arm, bearing a long stout filament with hooked tip, and a short blade-like one; a large ribbed leaf inserted on the stem towards the base and rather on the inner side; middle filament blade-like, close to the outer group of widened filaments, which exceed the leaf. Inner division of the lobe of side piece with the arms well separated, the inner about half as long as the outer, each bearing a stout sinuate filament with flattened pointed tip. Paramere curved to a pointed tip, distinct, bearing the articulated plate toward its base; mesosomal plate with a point on one side, not emarginate or furcate, the other angle widely rounded and finely denticulate; articulated plate elliptical, strongly emarginate at the tip on one side; basal hooks moderate, curled, broad. Tenth sternites slender, with comb-shaped tip of about seven teeth; a small shoulder at base. Ninth tergites triangularly elliptical, with broad base, obliquely directed, densely and rather shortly setose.

The structure is allied to *Culex* (*Choeroporpa*) *holoneus* Dyar, but the reduction of the mesosomal plate has not proceeded so far as in that species.

Types, five males and nine females; two males and four females in the National Museum, No. 23943, U. S. Nat. Mus., three males and five females in the Army Medical Museum; Cativa, Canal Zone, Panama, October 19, 1920 (J. B. Stropshire).

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